#### PRELIMINARY ANALYSIS

## FINANCIAL AUDIT OF THE

#### MICHIGAN STATE POLICE RETIREMENT SYSTEM

OFFICE OF RETIREMENT SYSTEMS

DEPARTMENT OF MANAGEMENT AND BUDGET

October 1, 1993 through September 30, 1995

#### **EXECUTIVE DIGEST**

## MICHIGAN STATE POLICE RETIREMENT SYSTEM

INTRODUCTION

This report contains the results of our financial audit of the Michigan State Police Retirement System (MSPRS), Office of Retirement Systems (ORS), Department of Management and Budget, for the period October 1, 1993 through September 30, 1995.

**AUDIT PURPOSE** 

This financial audit was conducted as part of the constitutional responsibility of the Office of the Auditor General. Financial audits are conducted at various intervals to permit the Auditor General to express an opinion on the State's financial statements.

**BACKGROUND** 

The State Police Pension, Accident, and Disability Fund was created in 1935 for employees of the Michigan Department of State Police who have subscribed to the constitutional oath of office. Effective October 1, 1986, Act 182, P.A. 1986 (Sections 38.1601 - 38.1648 of the *Michigan Compiled Laws*), transferred the operations of the State Police Pension, Accident, and Disability Fund to the Office of Retirement Systems, Department of Management and Budget, and also created the Michigan State Police Retirement System. A nine-member retirement board oversees MSPRS.

MSPRS retirement provisions allow for the retirement of enlisted personnel after 25 years of service (which may include the purchase of up to 2 years of military service credit) at 60% of the officer's final average compensation.

<sup>\*</sup> See glossary on page 48 for definition.

There were 1,831 and 1,759 persons (retirees, spouses, and dependent children) on the retirement payroll as of September 30, 1995 and September 30, 1994, respectively. The retirement payroll for the fiscal years ended September 30, 1995 and September 30, 1994 was \$35,507,584 and \$33,046,314, respectively.

# AUDIT OBJECTIVES AND CONCLUSIONS

**Audit Objective:** To assess the adequacy of MSPRS's internal control structure.

**Conclusion:** Our assessment of MSPRS's internal control structure did not disclose any material weaknesses\*. However, we noted certain reportable conditions\* in the areas of retirement benefit\* internal controls, retirement allowance computations, and membership data (Findings 1 through 3).

**Audit Objective:** To assess MSPRS's compliance with applicable statutes, the *Michigan Administrative Code*, State procedures, and Department policies and procedures.

**Conclusion:** Our assessment of MSPRS's compliance with applicable statutes, the *Michigan Administrative Code*, policies, and procedures did not disclose any instances of noncompliance that could have a material effect on MSPRS's financial statements. However, we noted certain reportable conditions involving MSPRS's incorrect computation of retirement allowances for those retirees receiving worker's compensation benefits (Finding 1) and retirees whose final average compensation included supplemental longevity payments or excess compensatory time payoffs (Finding 2). These findings are reported under the internal control structure objective of this report.

**Audit Objective:** To audit MSPRS's financial statements as of and for the fiscal years ended September 30, 1995 and September 30, 1994.

<sup>\*</sup> See glossary on page 48 for definition.

**Conclusion:** We expressed an unqualified opinion on the financial statements for the fiscal years ended September 30, 1995 and September 30, 1994. However, we noted a reportable condition pertaining to the MSPRS unfunded actuarially accrued liability (Finding 4).

#### **AUDIT SCOPE**

Our audit scope was to examine the financial and other records of the Michigan State Police Retirement System for the period October 1, 1993 through September 30, 1995. Our audit was conducted in accordance with generally accepted auditing standards and *Government Auditing Standards* issued by the Comptroller General of the United States and, accordingly, included such tests of the records and such other auditing procedures as we considered necessary in the circumstances.

AGENCY RESPONSES AND PRIOR AUDIT FOLLOW-UP Our audit report contains 4 findings and 8 corresponding recommendations. ORS indicated that it has either complied with or taken steps to comply with all the recommendations.

MSPRS complied with 9 of our 11 prior audit recommendations; the other 2 are repeated in this report.

<sup>\*</sup> See glossary on page 48 for definition.

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Mr. Mark A. Murray, Director Department of Management and Budget Lewis Cass Building Lansing, Michigan

Dear Mr. Murray:

This is our report on the financial audit of the Michigan State Police Retirement System, Office of Retirement Systems, Department of Management and Budget, for the period October 1, 1993 through September 30, 1995.

This report contains our executive digest; description of agency; audit objectives, audit scope, and agency responses and prior audit follow-up; comments, findings, recommendations, and agency preliminary responses; and independent auditor's reports on the internal control structure, on compliance with laws and regulations, and on the financial statements. This report also contains the Michigan State Police Retirement System financial statements and notes to financial statements; required supplementary information; and a glossary of acronyms and terms.

Our comments, findings, and recommendations are organized by audit objective. The agency preliminary responses were taken from the agency's responses subsequent to our audit fieldwork. The *Michigan Compiled Laws* and administrative procedures require that the audited agency develop a formal response within 60 days after release of the audit report.

We appreciate the courtesy and cooperation extended to us during this audit.

Sincerely,

Thomas H. McTavish, C.P.A. Auditor General

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#### **Description of Agency**

The State Police Pension, Accident, and Disability Fund was created in 1935 for employees of the Michigan Department of State Police who have subscribed to the constitutional oath of office. Effective October 1, 1986, Act 182, P.A. 1986 (Sections 38.1601 - 38.1648 of the *Michigan Compiled Laws*), transferred the operations of the State Police Pension, Accident, and Disability Fund to the Department of Management and Budget, and also created the Michigan State Police Retirement System (MSPRS). A nine-member retirement board oversees MSPRS.

MSPRS retirement provisions allow for the retirement of enlisted personnel after 25 years of service (which may include the purchase of up to 2 years of military service credit) at 60% of the officer's final average compensation.

There were 1,831 and 1,759 persons (retirees, spouses, and dependent children) on the retirement payroll as of September 30, 1995 and September 30, 1994, respectively. The retirement payroll for the fiscal years ended September 30, 1995 and September 30, 1994 was \$35,507,584 and \$33,046,314, respectively.

## Audit Objectives, Audit Scope, and Agency Responses and Prior Audit Follow-Up

#### **Audit Objectives**

Our financial audit of the Michigan State Police Retirement System (MSPRS), Office of Retirement Systems (ORS), Department of Management and Budget, had the following objectives:

- 1. To assess the adequacy of MSPRS's internal control structure.
- 2. To assess MSPRS's compliance with applicable statutes, the *Michigan Administrative Code*, State procedures, and Department policies and procedures.
- 3. To audit MSPRS's financial statements as of and for the fiscal years ended September 30, 1995 and September 30, 1994.

#### Audit Scope

Our audit scope was to examine the financial and other records of the Michigan State Police Retirement System for the period October 1, 1993 through September 30, 1995. Our audit was conducted in accordance with generally accepted auditing standards and *Government Auditing Standards* issued by the Comptroller General of the United States and, accordingly, included such tests of the records and such other auditing procedures as we considered necessary in the circumstances.

#### Agency Responses and Prior Audit Follow-Up

Our report contains 4 findings and 8 corresponding recommendations. ORS indicated that it has either complied with or taken steps to comply with all the recommendations.

The agency preliminary response which follows each recommendation in our report was taken from the agency's written comments and oral discussion subsequent to our audit fieldwork. Section 18.1462 of the *Michigan Compiled Laws* and Department of Management and Budget Administrative Guide procedure 1280.02 require the Department to develop a formal response to our audit findings and recommendations within 60 days after release of the audit report.

MSPRS complied with 9 of our 11 prior audit recommendations; the other 2 are repeated in this report.

## COMMENTS, FINDINGS, RECOMMENDATIONS, AND AGENCY PRELIMINARY RESPONSES

#### INTERNAL CONTROL STRUCTURE

#### COMMENT

**Audit Objective:** To assess the adequacy of the Michigan State Police Retirement System's (MSPRS's) internal control structure.

**Conclusion:** Our assessment of MSPRS's internal control structure did not disclose any material weaknesses. However, we noted certain reportable conditions in the areas of retirement benefit internal controls, retirement allowance computations, and membership data.

The Michigan Administrative Information Network (MAIN) is the Statewide financial management system implemented in fiscal year 1994-95. Individual State agencies are not responsible for the design of the Statewide policies and controls of MAIN. However, because MAIN is a Statewide system, which all State agencies are required to use, the internal control structure of each agency, including MSPRS, is affected to varying degrees by MAIN.

Because MSPRS's internal control structure is affected by this Statewide system, professional auditing standards required our assessment of internal controls in MSPRS to include elements reviewed in our financial related audit of MAIN. That audit reported 29 reportable conditions, including 3 material weaknesses, which are more fully explained in our separately issued report dated August 31, 1996.

#### **FINDING**

#### 1. Retirement Benefit Internal Controls

The Office of Retirement System's (ORS's) internal control structure over the computation of retirement allowances had the following weaknesses:

a. ORS did not always adhere to its retirement allowance computation procedures.

ORS procedures require two employees to independently compute retirement allowances to help ensure accurate pension benefits. However, our review of 30 MSPRS files disclosed 5 instances in which only one person computed the retirement allowance. As a result, ORS did not accurately process 2 of 5 files. The lack of two independent computations of retirement allowances increases the risk of inaccurate pension benefits.

In our prior audit, we recommended that ORS ensure that all pension payroll calculations are prepared and reviewed in accordance with prescribed procedures. ORS concurred and stated that it had implemented the recommendation. However, management did not ensure staff compliance with prescribed procedures.

b. ORS did not adjust retirees' retirement allowances as required by Section 38.1626(4) of the *Michigan Compiled Laws* (Section 26(4), Act 182, P.A. 1986, as amended in 1991). If a retiree receives both a retirement allowance and worker's compensation benefits, the combined amount is not to exceed the retiree's final average compensation (FAC).

Our review of 7 duty disability retirees who received both a retirement allowance and worker's compensation benefits disclosed that the combined benefit for all 7 retirees exceeded the FAC. As a result, monthly overpayments ranged from \$275 to \$558 per retiree, and the total overpayment during our audit period for the 7 retirees amounted to approximately \$28,500.

In addition, we noted 11 duty disability members\* who retired after the law was amended in 1991 but prior to our audit period. ORS should verify the accuracy of these duty disability retirement allowances.

#### **RECOMMENDATIONS**

WE AGAIN RECOMMEND THAT ORS ENSURE THAT ALL PENSION PAYROLL CALCULATIONS ARE PREPARED IN ACCORDANCE WITH PRESCRIBED PROCEDURES.

<sup>\*</sup> See glossary on page 48 for definition.

We also recommend that ORS verify the accuracy of all duty disability retirement allowances for members who retired since the amendment of Section 26(4), Act 182, P.A. 1986 (Section 38.1626(4) of the *Michigan Compiled Laws*).

#### AGENCY PRELIMINARY RESPONSE

ORS agreed with these recommendations. ORS informed us that it has established a procedure to ensure that two employees independently compute retirement allowances. Also, ORS informed us that it will recalculate all duty disability retirement allowances by March 1, 1997.

#### **FINDING**

#### 2. Retirement Allowance Computations

ORS did not comply with its control procedures to ensure the accurate computation of retiree pension payroll.

Our review of selected MSPRS retirement files disclosed:

a. ORS has not reviewed approximately 400 of the estimated 800 retirement allowances that may contain supplemental longevity payments as noted in our prior audit report. During that audit (which was completed in 1993), ORS incorrectly included supplemental longevity payments in the retirement allowance computations.

The director of MSPRS projected the correction of the retirement allowances by September 1994; however, not all corrections have been completed. ORS attributes the failure to correct the retirement allowances to limited staff resources. ORS procedures require two employees to manually compute the retirement allowances. However, ORS could increase the efficiency and accuracy of the retirement allowance computations by adopting the use of an automated retirement allowance computation system.

ORS's failure to timely review and adjust retirement allowances results in accumulating overpayments to retirees. This may increase the difficulty for ORS to recover overpayments and cause financial hardship for retirees who must repay the overpayments.

b. ORS incorrectly included excess compensatory time payoffs in 12 of 30 retirement allowance computations during our audit period.

In 1992, the bargaining agreement between the State and the Michigan State Police Troopers Association allowed employees to accumulate up to 120 hours of compensatory time. However, the bargaining agreement allows only 80 hours of the compensatory time paid to be included in the retirement allowance computation. ORS procedures did not limit the compensatory time payoffs to 80 hours for computing retirement allowances. Incorrect computations for the 12 retirement allowances resulted in an annual overpayment totaling approximately \$700.

c. ORS allowed two members to purchase less than 2 years of military service time and receive a full retirement allowance even though their credited service equaled 24 years, 11 months, and 10 days. In contrast, ORS required two other members to purchase sufficient military time to meet the 25-year service requirement.

Section 38.1624(1) of the *Michigan Compiled Laws* states that members may retire with 25 or more years of credited service and receive a retirement allowance equal to 60% of their FAC. Section 38.1632(2) of the *Michigan Compiled Laws* allows members to purchase up to 2 years of military service time to meet the 25-year service requirement.

Allowing members to retire with less than 25 years of service and receive 60% of their FAC is not in compliance with the *Michigan Compiled Laws*.

d. ORS did not have adequate control procedures to detect corrections to retirees' final wages made after placement on the retirement payroll.

We noted one instance when a retiree's final wage was reduced because of a payroll adjustment after the retiree was placed on the retirement payroll. As a result, the retiree's annual retirement allowance was overstated approximately \$1,600. ORS stated that it relies on the Personnel Division of the Michigan Department of State Police to inform it of any salary adjustments made after a retiree is placed on the retirement payroll. To ensure the accuracy of retirement allowance computations, ORS should develop control procedures to detect

changes to retirees' final wages made subsequent to placement on the retirement payroll.

#### **RECOMMENDATIONS**

To ensure the accurate computation of retiree pension payroll, we recommend that ORS:

- (a) Promptly review and correct errors in retirement allowance computations related to the inclusion of supplemental longevity payments.
- (b) Limit the inclusion of compensatory time payoffs in the retirement allowance computations in accordance with the bargaining agreement.
- (c) Award retirement allowances to only those members who have met the service requirements.
- (d) Develop control procedures to detect corrections to retirees' final wages made after placement on the retirement payroll.

#### **AGENCY PRELIMINARY RESPONSE**

ORS agreed with these recommendations and will comply by December 31, 1997.

#### **FINDING**

#### 3. Membership Data

ORS had not established a system to review its membership data base for errors prior to sending the data to the actuary. We detected inaccuracies in the data sent to the actuary for preparation of MSPRS's annual valuation.

ORS used the Personnel-Payroll Information System for Michigan (PPRISM) to update its active member data sent to the actuary. ORS is not responsible for maintaining the information on PPRISM. However, ORS can review the information on its data base and make necessary adjustments.

On a test basis, we reviewed the data contained in the data base sent to the actuary for 34 active members. For 7 members, the ORS data base contained service hours earned while under a different retirement system. ORS used the date that the employee started with the State rather than the date the employee became an active

member of MSPRS. In one instance, this resulted in the inclusion of 10 years of inappropriate service credit. Because only service hours earned as an active member of MSPRS are eligible credited service hours for retirement, the data base should have included only those service hours earned as an active member of MSPRS.

Although the actuary takes into account other attributes and assumptions of the membership, the completeness and accuracy of the data base affects the validity of the actuarial valuation and funding requirements of the system.

In our prior audit, we recommended that ORS review and correct errors in the MSPRS participant data. ORS concurred and was to comply by September 30, 1993.

#### RECOMMENDATION

WE AGAIN RECOMMEND THAT ORS REVIEW AND CORRECT ERRORS CONTAINED IN THE MSPRS MEMBERSHIP DATA BASE AND SUBMIT CORRECTED DATA TO THE ACTUARY.

#### AGENCY PRELIMINARY RESPONSE

ORS agreed with this recommendation and informed us that it has complied.

#### **COMPLIANCE WITH LAWS AND REGULATIONS**

#### COMMENT

**Audit Objective:** To assess MSPRS's compliance with applicable statutes, the *Michigan Administrative Code*, State procedures, and Department policies and procedures.

**Conclusion:** Our assessment of MSPRS's compliance with applicable statutes, the *Michigan Administrative Code*, policies, and procedures did not disclose any instances of noncompliance that could have a material effect on MSPRS's financial statements. However, we noted certain reportable conditions involving MSPRS's incorrect computation of retirement allowances for those retirees receiving worker's compensation benefits (Finding 1) and retirees whose final average compensation included supplemental longevity payments or excess compensatory time payoffs (Finding 2). These findings are reported under the internal control structure objective of this report.

#### FINANCIAL ACCOUNTING AND REPORTING

#### COMMENT

**Audit Objective:** To audit MSPRS's financial statements as of and for the fiscal years ended September 30, 1995 and September 30, 1994.

**Conclusion:** We expressed an unqualified opinion on the financial statements for the fiscal years ended September 30, 1995 and September 30, 1994. However, we noted a reportable condition pertaining to the MSPRS unfunded actuarially accrued liability.

#### **FINDING**

#### 4. <u>Unfunded Actuarially Accrued Liability</u>

The Department of Management and Budget did not reconcile actual State contributions to MSPRS with actuarially computed contribution requirements. In addition, the Department did not request an appropriation when the State's contributions to MSPRS were deficient of actuarial requirements.

Other State retirement systems' statutes require the Department of Management and Budget director to compute the difference between actual State contributions that a system received during the preceding fiscal year and the actuarially computed contribution requirements during the preceding State fiscal year. This difference, if any, is to be submitted in the executive budget to the Legislature for appropriation within the following five State fiscal years. The State Policy Retirement Act, however, does not include these provisions.

The difference between actual contributions and actuarially computed contribution requirements has contributed, in part, to MSPRS unfunded actuarially accrued liability (UAAL) increasing approximately \$50 million to \$176 million since 1991. UAAL is the excess of the actuarially accrued liability over the actuarial value of assets. UAAL as a percentage of active member payroll is an important measure of the funded status of a system. Generally, the lower the percentage of UAAL to active member payroll, the stronger the system. MSPRS' UAAL has increased from 138.5% as of September 30, 1991 to 190.4% as of September 30, 1995. Although UAAL's are not payable immediately, it is important that the amount does not become unreasonably high, thus requiring higher contributions from future taxpayers.

The UAAL increase can be attributed in part to the adoption of more conservative actuarial assumptions; improved plan benefits (annual 2% cost of living allowance); decreased active member payroll (from \$97 million to \$92 million), which affects the employer contribution; and an increase in the number of retirees (from 1,408 to 1,831). The percentages for funding UAAL have increased, which has increased the employer contributions approximately \$3 million; however, the retirement payroll has increased approximately \$13 million.

#### RECOMMENDATION

We recommend that the Department of Management and Budget request a statutory amendment providing for a reconciliation between actual State contributions to MSPRS and actuarially computed contribution requirements, with any differences being adjusted in future budget requests.

#### **AGENCY PRELIMINARY RESPONSE**

ORS agreed with this recommendation and will comply by December 31, 1997.

### Independent Auditor's Report on the Internal Control Structure

July 19, 1996

Mr. Mark A. Murray, Director Department of Management and Budget Lewis Cass Building Lansing, Michigan

Dear Mr. Murray:

We have audited the financial statements of the Michigan State Police Retirement System, Department of Management and Budget, as of and for the fiscal years ended September 30, 1995 and September 30, 1994 and have issued our report thereon dated July 19, 1996.

We conducted our audit in accordance with generally accepted auditing standards and *Government Auditing Standards* issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement.

The management of the Michigan State Police Retirement System and the management of the Department of Management and Budget are responsible for establishing and maintaining an internal control structure, which operates in conjunction with the Statewide internal control structure. In fulfilling this responsibility, estimates and judgments by management are required to assess the expected benefits and related costs of internal control structure policies and procedures. The objectives of an internal control structure are to provide management with reasonable, but not absolute, assurance that assets are safeguarded against loss from unauthorized use or disposition, and that transactions are executed in accordance with management's authorization and recorded properly to permit the preparation of financial statements in accordance with generally accepted accounting principles. Because of inherent limitations in any internal control structure, errors or irregularities may nevertheless occur and not be detected. Also, projection of any evaluation of the structure to future periods is subject to the risk that procedures may become inadequate because of changes in conditions or that the effectiveness of the design and operation of policies and procedures may deteriorate.

In planning and performing our audit of the financial statements for the fiscal years ended September 30, 1995 and September 30, 1994, we obtained an understanding of the

Michigan State Police Retirement System's internal control structure and internal control elements reviewed as part of our financial related audit of the Michigan Administrative Information Network. The Michigan Administrative Information Network is the Statewide financial management system implemented in fiscal year 1994-95 and, as such, affects the Michigan State Police Retirement System's internal control structure. With respect to the internal control structure, we obtained an understanding of the design of relevant policies and procedures and whether they have been placed in operation, and we assessed control risk in order to determine our auditing procedures for the purpose of expressing our opinion on the financial statements and not to provide an opinion on the internal control structure. Accordingly, we do not express such an opinion.

We noted certain matters involving the internal control structure and its operation that we consider to be reportable conditions under standards established by the American Institute of Certified Public Accountants. Reportable conditions involve matters coming to our attention relating to significant deficiencies in the design or operation of the internal control structure that, in our judgment, could adversely affect the Michigan State Police Retirement System's ability to record, process, summarize, and report financial data consistent with the assertions of management in the financial statements. The reportable conditions are more fully described in Findings 1 through 3.

Also, our financial related audit of the Michigan Administrative Information Network noted 29 reportable conditions on the internal control structure which are more fully explained in our separately issued report on the Michigan Administrative Information Network dated August 31, 1996. Although the Michigan State Police Retirement System, Department of Management and Budget, is not responsible for the design of the Statewide policies and controls of the Michigan Administrative Information Network, which all State agencies are required to use, these reportable conditions affected the Michigan State Police Retirement System's internal control structure.

A material weakness is a reportable condition in which the design or operation of one or more of the specific internal control structure elements does not reduce to a relatively low level the risk that errors or irregularities in amounts that would be material in relation to the financial statements being audited may occur and not be detected within a timely period by employees in the normal course of performing their assigned functions.

Our consideration of the internal control structure would not necessarily disclose all matters in the internal control structure that might be reportable conditions and, accordingly, would not necessarily disclose all reportable conditions that are also considered to be material weaknesses as defined above. However, we believe none of the Michigan State Police Retirement System's reportable conditions described above is a material weakness. Three of the 29 reportable conditions identified in our financial related audit of the Michigan Administrative Information Network were material

weaknesses. These conditions were considered in determining the nature, timing, and extent of the procedures performed in our audit of the financial statements for the fiscal years ended September 30, 1995 and September 30, 1994.

Sincerely,

Thomas H. McTavish, C.P.A. Auditor General

### Independent Auditor's Report on Compliance With Laws and Regulations

July 19, 1996

Mr. Mark A. Murray, Director Department of Management and Budget Lewis Cass Building Lansing, Michigan

Dear Mr. Murray:

We have audited the financial statements of the Michigan State Police Retirement System, Department of Management and Budget, as of and for the fiscal years ended September 30, 1995 and September 30, 1994 and have issued our report thereon dated July 19, 1996.

We conducted our audit in accordance with generally accepted auditing standards and *Government Auditing Standards* issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement.

Compliance with laws, regulations, contracts, and grants applicable to the Michigan State Police Retirement System is the responsibility of the Michigan State Police Retirement System and the Department of Management and Budget management. As part of obtaining reasonable assurance about whether the financial statements are free of misstatement, we performed tests of the Michigan State Police Retirement System's compliance with certain provisions of laws, regulations, contracts, and grants. However, the objective of our audit of the financial statements was not to provide an opinion on overall compliance with such provisions. Accordingly, we do not express such an opinion.

The results of our tests disclosed instances of noncompliance that are required to be reported under *Government Auditing Standards*.

The Michigan State Police Retirement System incorrectly computed retirement allowances for those retirees receiving worker's compensation benefits and retirees whose final average compensation included supplemental longevity payments or excess compensatory time payoffs. These instances of noncompliance are more fully described in Findings 1 and 2.

We considered these instances of noncompliance in forming our opinion on whether the Michigan State Police Retirement System financial statements are presented fairly, in all material respects, in conformity with generally accepted accounting principles, and this report does not affect our report dated July 19, 1996 on those financial statements.

Sincerely,

Thomas H. McTavish, C.P.A. Auditor General

### Independent Auditor's Report on the Financial Statements

July 19, 1996

Mr. Mark A. Murray, Director Department of Management and Budget Lewis Cass Building Lansing, Michigan

Dear Mr. Murray:

We have audited the accompanying balance sheet of the Michigan State Police Retirement System, Department of Management and Budget, as of September 30, 1995 and September 30, 1994 and the related statement of revenues, expenses, and changes in fund balance for the fiscal years then ended. These financial statements are the responsibility of the Michigan State Police Retirement System management and the Department of Management and Budget management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with generally accepted auditing standards and *Government Auditing Standards* issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

As discussed in Note 1a, the accompanying financial statements present only the Michigan State Police Retirement System and are not intended to present fairly the financial position and results of operations of the State of Michigan or its pension trust funds.

In our opinion, the financial statements referred to in the first paragraph present fairly, in all material respects, the financial position of the Michigan State Police Retirement System as of September 30, 1995 and September 30, 1994 and the results of its operations for the fiscal years then ended on the basis of accounting described in Note 2a.

Our audit was made for the purpose of forming an opinion on the Michigan State Police Retirement System's financial statements. The required supplementary information listed in the table of contents is presented for purposes of additional analysis and is not a required part of the financial statements referred to in the first paragraph. The required supplementary information for the fiscal years ended September 30, 1995 and September 30, 1994, except for the active member payroll and the unfunded pension benefit obligations as a percentage of the covered payroll, has been subjected to the auditing procedures applied in our audit of the Michigan State Police Retirement System financial statements and, in our opinion, is fairly stated in all material respects in relation to the financial statements. Our audit did not comprehend the active member payroll, the unfunded pension benefit obligations as a percentage of the covered payroll, and the required supplementary information for fiscal years ended September 30, 1993 and before and, accordingly, we express no opinion concerning such information.

Sincerely,

Thomas H. McTavish, C.P.A. Auditor General

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## MICHIGAN STATE POLICE RETIREMENT SYSTEM Balance Sheet As of September 30

400570		<u>1995</u>		<u>1994</u>
ASSETS Equity in Common Cash (Note 2d(2)) Accounts receivable	\$	1,071,859 5,865,833	\$	5,177,128 3,990,702
Total cash and accounts receivable	\$	6,937,692	\$	9,167,830
Investments - book value: (Note 2c) Short-term investments, at cost (market value: 1995, \$59,951,837; 1994, \$43,913,960)	\$	59 770 020	¢	43,644,147
Bonds and mortgages, at amortized cost (market value: 1995,	Φ	58,779,929	\$	, ,
\$200,040,023; 1994, \$190,360,764) Common stock, at cost (market value: 1995, \$281,871,219;		190,795,912		192,460,846
1994, \$238,693,212) Real estate, at cost		200,438,305		194,554,409
(market value: 1995, \$43,274,286; 1994, \$36,493,004) Alternative investments, at cost (market value: 1995, \$39,107,044;		42,299,714		38,053,144
1994, \$32,713,231) International investments, at cost (market value: 1995, \$25,148,119;		26,508,960		21,649,043
1994, \$20,790,257 Subtotal investments (market value: 1995, \$648,492,528;		23,574,840		20,920,864
1994, \$562,964,428) Total Assets	\$ \$	542,397,660 549,335,352	\$ \$	511,282,453 520,450,283
LIABILITIES  Accounts payable and other accrued				
liabilities  Net assets available for benefits	\$	(733,488) 548,601,864	\$	(4,990,440) 515,459,843
FUND BALANCE Actuarial present value of credited projected pension benefits payable to current retirants and				
beneficiaries (Note 3) Actuarial present value of credited projected pension benefits payable	\$	422,960,057	\$	394,292,384
to terminated vested participants Actuarial present value of credited projected pension benefits for active employees:		28,722,808		4,488,705
Member contributions Employer financed portion		1,496,727 345,424,934		1,769,642 306,131,647
Total credited projected pension benefit obligation Pension benefit obligation in	\$	798,604,526	\$	706,682,378
excess of net assets Fund Balance (Note 3)	\$	(250,002,662) 548,601,864	\$	(191,222,535) 515,459,843
The accompanying notes are an inte	egral p		ncials	

#### MICHIGAN STATE POLICE RETIREMENT SYSTEM

#### Statement of Revenues, Expenses, and Changes in Fund Balance For the Fiscal Years Ended September 30

							F	Reserves For				
				Employee ontributions	Employer's Contributions			Retired Benefit Payments		Benefit		
		1995		1994	1995		1994		_	1995		1994
OPERATING REVENUES Member contributions: Military and other Employer contributions (Note 4) Investment income (Note 2c)	\$	71,008	\$	45,384	\$	25,047,023	\$	23,360,943	\$		\$	
Total Operating Revenues	\$	71,008	\$	45,384	\$	25,047,023	\$	23,360,943	\$	0	\$	
OPERATING EXPENSES Real estate Administrative expenses Retirement allowances Health insurance Dental and vision insurance	\$		\$		\$		\$		\$	35,507,584	\$	33,046,31
Total Operating Expenses	\$	0	\$	0	\$	0	\$	0	\$	35,507,584	\$	33,046,31
Net Operating Income (Loss)	\$	71,008	\$	45,384	\$	25,047,023	\$	23,360,943	\$	(35,507,584)	\$	(33,046,314
OTHER CHANGES IN RESERVES Interest allocation Transfers for retirements (Note 2b)  Total Other Changes in Reserves	\$	57,198 (401,121) (343,923)	\$	66,138 (474,419) (408,281)	\$	9,614,254 (69,485,365) (59,871,111)	\$	14,246,877 (30,949,574) (16,702,697)	\$	30,096,040 69,886,486 99,982,526	\$	26,749,42 31,423,99 58,173,41
Net Fund Balance Additions	\$	(272,915)	\$	(362,897)	\$	(34,824,088)	\$	6,658,246	\$	64,474,942	\$	25,127,09
Reserve Balances - Beginning of Year		1,769,643		2,132,540		195,112,411	_	188,454,165		324,807,020		299,679,92
Reserve Balances - End of Year (Note 3)	<u>\$</u>	<u>1,496,728</u>	<u>\$</u>	<u>1,769,643</u>	<u>\$</u>	<u>160,288,323</u>	<u>\$</u>	<u>195,112,411</u>	<u>\$</u>	389,281,962	<u>\$</u>	324,807,02

The accompanying notes are an integral part of the financial statements.

			ndistributed nvestment Income				Health Related Benefits		-	Tota	ıl
	1995		1994		1995					1994	
		_		_		_		_			
\$		\$		\$		\$		\$	71,008	\$	45,384
					12,707,315		12,585,052		37,754,338		35,945,995
_	41,578,893		33,786,597	_		_		_	41,578,893		33,786,597
\$	41,578,893	\$	33,786,597	\$	12,707,315	\$	12,585,052	\$	79,404,239	\$	69,777,976
\$	129,528	\$	139,693	\$		\$		\$	129,528	\$	139,693
Ψ	493,400	Ψ	449,033	Ψ		Ψ		Ψ	493,400	Ψ	449,033
	493,400		449,033						35,507,584		33,046,314
					9,144,387		10,799,695		9,144,387		10,799,695
					987,319		783,512		987,319		783,512
_		_		_	907,319	_	703,312	_	907,319	_	700,512
\$	622,928	\$	588,726	\$	10,131,706	\$	11,583,207	\$	46,262,218	\$	45,218,247
\$	40,955,965	\$	33,197,871	\$	2,575,609	\$	1,001,845	\$	33,142,021	\$	24,559,729
\$	(39,767,492)	\$	(41,062,435)	\$		\$		\$	0	\$	0
\$	(39,767,492)	\$	(41,062,435)	\$	0	\$	0	\$	0	\$	0
\$	1,188,473	\$	(7,864,564)	\$	2,575,609	\$	1,001,845	\$	33,142,021	\$	24,559,729
	3,502,014	_	11,366,580		(9,731,245)		(10,733,091)	_	515,459,843	_	490,900,114
<u>\$</u>	<u>4,690,487</u>	<u>\$</u>	<u>3,502,016</u>	<u>\$</u>	<u>(7,155,636)</u>	<u>\$</u>	(9,731,246)	<u>\$</u>	<u>548,601,864</u>	<u>\$</u>	<u>515,459,843</u>

#### **Notes to Financial Statements**

#### Note 1 Plan Description

#### a. Reporting Entity

The Michigan State Police Retirement System (MSPRS) is a single employer, Statewide public employee retirement plan governed by the State of Michigan and created under Act 182, P.A. 1986, as amended. MSPRS was established by the State of Michigan for purposes of providing retirement, survivor, and disability benefits to the employees of the Michigan Department of State Police who have subscribed to the constitutional oath of office.

MSPRS is a component unit of the State of Michigan. As such, MSPRS is considered part of the State of Michigan financial reporting entity and is included in the *State of Michigan Comprehensive Annual Financial Report* as a pension trust fund. MSPRS operates within the Michigan Department of Management and Budget, Office of Retirement Systems. The Department director appoints the office director who serves as executive secretary to the MSPRS board, with which general oversight of the retirement system resides. The State Treasurer serves as the investment officer and custodian for the system's assets.

MSPRS and its board do not exercise oversight responsibility over any other entities; therefore, MSPRS is the only entity included in these financial statements. Accordingly, they are not intended to present fairly the financial position and results of operations of the State of Michigan or its pension trust funds.

At September 30, 1995 and September 30, 1994, MSPRS membership consisted of:

	<u>1995</u>	<u>1994</u>
Retirees and beneficiaries		
currently receiving benefits:		
Retirement annuities	1,437	1,380
Survivor annuities	269	264
Disability annuities	<u>125</u>	<u>115</u>
Total	<u>1,831</u>	<u>1,759</u>
Inactive employees entitled to benefits		
and not yet receiving them	<u>109</u>	<u>32</u>
Current employees:		
Vested	1,179	1,166
Nonvested	<u>1,002</u>	826
Total	<u>2,181</u>	<u>1,992</u>

All benefits vest after 10 years of service. Plan members may retire at any age with 25 years of credited service, or at age 50 with 10 or more years of credited service. The system also provides nonduty disability benefits and nonduty death benefits after 10 years of service. The service provision is waived for duty disability and duty death benefits. Benefits are paid monthly over the member's or survivor's lifetime and are equal to 60% of the member's final average compensation (FAC) after 25 years of service; or with 10 to 24 years of service 2.4% of FAC times years of service. Deferred members are paid benefits equal to 2% of final average compensation times years of service. The FAC period for members is the last 24 consecutive months. The system also provides health, dental, and vision insurance coverage for retirees.

#### b. Other Postemployment Benefits

Under Section 42 of the State Police Employees Retirement Act, all retirees have the option of continuing health, dental, and vision insurance coverage. The employer funds these benefits on a pay-as-you-go basis. Retirees contribute 5% and 10% of the monthly premium amount for the health and

dental insurance coverages, respectively. The number of plan participants and other relevant financial information is as follows:

	Fisc	Fiscal Year				
	1994-95	<u>1993-94</u>				
Health/Dental/Vision Plan						
Eligible participants	1,831	1,759				
Participants receiving benefits	1,673	1,604				
Expense for year	\$10,131,706	\$11,583,207				
Payroll contribution rate	10.9%	13.1%				

#### Note 2 Summary of Significant Accounting Policies and Plan Asset Matters

#### a. Accrual Basis

MSPRS financial statements are prepared on the accrual basis of accounting. The accrual basis of accounting, which emphasizes the measurement of total financial position and results of operations is explained in more detail in the State of Michigan Comprehensive Annual Financial Report. Contributions from the State are recognized as revenue in the period in which employee service to the State is provided. The Governmental Accounting Standards Board (GASB) has issued Statement Nos. 25, 26, and 28. GASB Statement Nos. 25 and 26 establish the financial reporting framework for pension plans, which includes fair value accounting for investments, recognition of unrealized investment gains and losses, amortization of unfunded actuarial liabilities for 40 years, and requires certain additional disclosures regarding postemployment healthcare benefits. GASB Statement No. 28 establishes accounting and financial reporting standards for recognizing assets and liabilities arising from collateralized securities lending transactions in which governmental entities (lenders) transfer their securities to brokerdealers and other entities (borrowers). The above statements are to be adopted by MSPRS for fiscal year 1996-97. Management has not yet evaluated the total effect on its financial statements.

#### b. Fund Accounting

(1) Reserve for Employee Contributions. Members contribute to purchase special service credit or repay previously refunded contributions. The Employee Contribution Reserve (ECR) represents active member

contributions less amounts transferred to reserves for retirement and disability or amounts refunded to terminated members. Interest is credited annually to ECR from the Reserve for Undistributed Investment Income.

- (2) Reserve for Retired Benefit Payments (RRBP). RRBP represents the reserves for payment of future retirement benefits to persons already on the retirement rolls. At retirement, a member's accumulated contributions are transferred to RRBP (from ECR). Interest is credited to RRBP (from the Reserve for Undistributed Investment Income) and monthly "membership" allowances are debited. An amount sufficient to fund each member's future "membership" retirement allowance is transferred from the Reserve for Employer Contributions to RRBP at the time of retirement.
- (3) Reserve for Employer Contributions. All employer contributions are credited to the Reserve for Employer Contributions (REC). Interest is credited annually to REC (from the Reserve for Undistributed Investment Income) and transfers are made to RRBP to fund future pensions which are paid from this source.
- (4) Reserve for Health Benefits. All employer contributions for health benefits are deposited into this reserve, and health benefits are disbursed from this reserve. A separate dental/vision reserve is established.
- (5) Reserve for Undistributed Investment Income. This reserve is credited with all investment earnings, and all administrative expenses are reimbursed from this reserve. Interest transfers are made annually to the other reserves.
- (6) Actuarial Reserves. The amount shown represents the difference between calculated actuarial liabilities and net assets available for benefits at the valuation dates September 30, 1995 and September 30, 1994.

(7) Fixed assets, which are immaterial in amount, are not recognized on the accounting records. Administrative disbursements are treated as expenses and equipment expenses are not capitalized.

#### c. <u>Investments</u>

Under the Executive Organization Act of 1965, as amended, the authority for the purchase and the sale of investments resides with the State Treasurer. Investments are made subject to the Michigan Public Pension Investment Act, Act 314, P.A. 1965, as amended, which authorizes, with certain restrictions, the investment of system assets in stock, corporate and government bonds and notes, mortgages, real estate, and certain short-term and alternative investments. Investments must be made for the exclusive purposes of providing benefits to active and retired members and beneficiaries, and of defraying expenses of investing the assets.

- (1) Book Value. Bonds, notes, and mortgages are carried at amortized cost. Short-term investments and common and preferred stock and derivatives for equities are carried at cost. Real estate owned directly is recorded at depreciated cost. Investments in limited partnership interest are recorded on the equity method. The amortized cost of investments sold is determined using the average cost of these securities. Alternative investments include bonds, limited partnerships, preferred stock, and common stock.
- (2) Investment Income. Dividend income is recognized based on the ex-dividend date, and interest income is recognized on the accrual basis as earned. All gains and losses on investments are recognized at the point of sale and are included in investment income. Purchases and sales of investments are recorded as of the trade date (the date upon which the transaction is initiated), except for purchase and sale of mortgages, real estate, and alternative investments which are recorded as of the settlement date (the date upon which the transaction is ultimately completed). The effect of recording such transactions as of the settlement date does not materially affect the financial statements.
- (3) Market Values. Market values for common and preferred stock are based on September 30, 1995 and 1994 closing market quotations.

Market values for derivatives are based on the value of the underlying investment and the value of the derivative instrument. Fixed debt quotations are provided from a national brokerage pricing service. Mortgage market values are determined on the basis of comparable yield available in the marketplace. Market values for limited partnership interest are based on periodic appraisals. Market values of alternative investments are based on periodic assessments of the underlying investments. At September 30, 1995, the market value of the investment portfolio exceeded the book value by \$105,822,957 including gross unrealized gains of \$115,411,602 and gross unrealized losses of \$9,588,645. At September 30, 1994, the market value of the investment portfolio exceeded the book value by \$51,681,976 including gross unrealized gains of \$77,335,726 and gross unrealized losses of \$25,653,750.

- (4) Alternative Investments. Act 55, P.A. 1982, amended Act 314 P.A. 1965 (Section 38.1140d of the *Michigan Compiled Laws*), to permit the investment of up to 5% of MSPRS assets in alternative investments and up to 15% of the assets not otherwise qualified under Act 314, P.A. 1965.
- (5) International Investments. To further diversify the pension funds portfolio into international equities, the State Treasurer entered into a number of international equity index-based swap agreements during the years ended September 30, 1995 and September 30, 1994. The swap agreements provide that MSPRS will pay quarterly, over the term of the swap agreements, interest indexed to the three-month London Inter Bank Offer Rate (LIBOR), adjusted for an interest rate spread, on the notional principal amount stated in the agreements. At the maturity of the swap agreements, MSPRS will either receive the increase in the international equity indexed-based rates, from the level of the indices at the inception of the agreements, or pay the decrease in the level of the indices. Fixed income LIBOR Floaters were purchased in the open market to correspond with the notional amount of the swap agreements as the underlying investments. The State Treasurer maintains custody and control of these fixed income investments. Derivatives are used for a small amount of the pension trust fund portfolios. derivatives are not used for speculation and they are However,

not used to leverage the investment portfolios. Less than 5% of the total pension trust funds portfolio has been invested from time to time in future contracts, collateralized mortgages, and swap agreements. Swap agreements represent the largest category of derivatives used and total less than 4% of the total portfolio.

- (6) Investments Exceeding 5% of Net Assets. At September 30, 1995 and September 30, 1994, the system did not hold any individual investment that exceeded 5% of net assets available for benefits.
- (7) Categories of Investment Risk. GASB Statement No. 3 requires classification of investments into one of three categories based upon credit risk. Category 1 includes investments that are insured or registered or which are held by MSPRS or its agent in MSPRS's name. Category 2 includes uninsured and unregistered investments which are held by the counterparty's trust departments or agent in MSPRS's name. Category 3 includes uninsured and unregistered investments which are held by the counterparty, its trust department or agent, but not in MSPRS's name. At September 30, 1995 and September 30, 1994, all investments of MSPRS are classified as Category 1, except for the following: Category 2 investments classified as short-term, Category 3 investments classified as government securities, and certain investments not categorized but classified as real estate and alternative investments on the balance sheets:

### Fiscal Year 1993-94 Category 2 Investments

Prime Commercial Paper \$4,235,889 Market Value \$4,250,861

<u>Fiscal Year 1993-94</u> <u>Category 3 Investments</u>

Book Value Market Value
Collateralized U.S. Treasury Notes \$226,864 \$233,617

#### **Investments Not Categorized**

	_ <u>B</u> c	ook Value		Market Value
	1995	1994	19	995 1994
Real Estate, Alternative				
Investments, Mortgages,				
and Private Placements	\$92,608,264	\$83,469,431		\$106,962,862
\$93,587,979				

#### d. Related Party Transactions

(1) Leases and other. MSPRS leases operating space and is provided certain administrative services by the State not otherwise made available by bid. The costs for such services charged to the fund by the State are:

	<u> 1995 </u>	<u>1994</u>
Rent	\$ 1,855	\$ 1,804
Administrative Services	\$18,224	\$15,883
Data Processing	\$33,075	\$ 7,576

(2) Common Cash Fund. The cash includes \$1,071,859 for fiscal year 1994-95 and \$5,177,128 for fiscal year 1993-94 which represents funds deposited in a common cash investment pool maintained for various State operating funds. The participating funds in the common cash pool earn interest at various rates depending upon prevailing short-term interest rates. Earnings from these activities amounted to \$268,778 for fiscal year 1994-95 and \$139,709 for fiscal year 1993-94.

#### Note 3 Funding Status and Progress

Presented below is the total pension benefit obligation of MSPRS. The amount of the total pension benefit obligation is based on a standardized measurement established by GASB Statement No. 5 that, with some exceptions, must be used by the public employee retirement systems (PERS). The standardized measurement is the actuarial present value of estimated pension benefits that will be paid in future years as a result of employee services performed to date and is adjusted for the effects of projected salary increases and any step rate benefits. A standardized measure of the pension benefit obligation was adopted by GASB to enable readers of the PERS financial statements to (a) assess the

PERS funding status on a going-concern basis, (b) assess progress made in accumulating sufficient assets to pay benefits when due, and (c) make comparisons among PERS. Based on this measurement, the system is 68.7% funded as of September 30, 1995 and 72.9% funded as of September 30, 1994, based on book value.

The actuarial present value of projected benefits consists of: (a) the actuarial present value of projected benefits payable to current retirants and beneficiaries, (b) the actuarial present value of projected benefits payable to terminated vested participants, and (c) the actuarial present value of credited projected benefits for active participants. The actuarial present value of credited projected benefits for active participants represents a portion of the actuarial present value of projected total benefits, giving effect to estimated salary increases to date of retirement. The portion assumed to be credited is the portion represented by the ratio of (a) the number of years of covered service rendered as of the date of the valuation to (b) the total covered service which will have been rendered as of the expected date of retirement. The total actuarial present value of credited projected benefits increased by \$91,922,148 from September 30, 1994 to September 30, 1995. The total actuarial present value of credited projected benefits increased by \$32,978,953 from September 30, 1993 to September 30, 1994. amount, \$2,840,696 is attributable to the assumption changes effective September 30, 1994 as more fully disclosed in Note 4. There were no assumption changes during the fiscal year for the 1995 valuation year.

<sup>\*</sup> See glossary on page 48 for definition.

The standardized measure of the pension benefit obligation in excess of net assets as of September 30, 1995 and September 30, 1994 is:

	<u> 1995</u>	1994
Pension benefit obligation:		
Retirees and beneficiaries currently		
receiving benefits and terminated		
employees not yet receiving benefits	\$451,682,865	\$398,781,089
Current employees:		
Accumulated employee contributions	1,496,727	1,769,642
Employer-financed vested	304,511,603	274,542,115
Employer-financed nonvested	40,913,331	31,589,532
Total pension benefit obligation	<u>\$798,604,526</u>	\$706,682,378
Net assets available for benefits		
(market value: 1995, \$654,696,731;		
1994, \$567,135,416)	<u>\$548,601,864</u>	<u>\$515,459,843</u>
Pension benefit obligation in excess		
of net assets	<u>\$250,002,662</u>	<u>\$191,222,535</u>

Because the standardized measure is used only for disclosure purposes by PERS, the measurement is independent of the actuarial computation made to determine contributions to PERS. The entry age normal actuarial method used to determine contributions to PERS is explained in Note 4 and will yield different actuarial liability totals because different actuarial cost methods\* yield different results.

#### Note 4 Contributions Required and Contributions Made

Periodic employer contributions to the pension plan are determined on an actuarial basis using the entry age normal actuarial cost method. Normal cost is funded on a current basis. The unfunded actuarial accrued liability is funded over a 41-year period. Periodic contributions for both normal cost and the amortization of the unfunded actuarial accrued liability are based on the level percentage of payroll method so that contribution rates do not have to increase over decades of time.

<sup>\*</sup> See glossary on page 48 for definition.

Fiscal year 1994-95 employer required contributions increased 3.85%, or \$3,563,634, as a result of actuarial assumption changes made during fiscal year 1993-94. Employer contributions for retirement (net of health insurance) were: \$25,047,023 equivalent to 27.1% of the annual active member payroll of \$92,561,927 for fiscal year 1994-95, and \$23,360,943 equivalent to 26.4% of the annual active member payroll of \$88,554,512 for fiscal year 1993-94. Actuarial requirements totaled 30.16% of payroll or \$27,916,677 for fiscal year 1994-95 and 26.84% of payroll or \$23,768,031 for fiscal year 1993-94. Based on these calculations, contributions were deficient of requirements by \$2,869,654 for fiscal year 1994-95 and by \$407,088 for fiscal year 1993-94.

Significant actuarial assumptions used to compute pension contribution requirements are the same as those used to determine the standardized measure of the pension obligation. The significant assumptions used in the actuarial valuations as of September 30, 1995 and September 30, 1994 were:

- (a) Beginning with the 1994 valuation, an 8% smoothed market rate of return was used. For the 1993 valuation, a rate of return on the investment of 8.5% per year was used.
- (b) For the 1995 and 1994 valuations, active member payroll is assumed to increase 3% per year for the next 5 years and 5% per year thereafter. In prior years, salaries were assumed to increase 6.5% per year compounded annually.
- (c) For the 1995 and 1994 valuations, life expectancies were based on the 1983 Group Annuity Mortality Table, set forward 1 year for men and 2 years for women. For the 1993 valuation, pre and postretirement life expectancies were based on the 1971 Group Annuity Mortality Table for males with a 7-year setback for females.
- (d) Rates of non-death withdrawal from active service before retirement, rates of disability, and expected retirement ages.
- (e) Market values greater or less than the assumption are spread over a fiveyear period. For years prior to 1993 and beginning in 1987, market value of assets was used for funding purposes and changes in accumulated unrealized appreciation or depreciation are spread over a five-year period.

Adoption of more conservative actuarial assumptions effective for the September 30, 1994 actuarial valuation increased the employer contribution rate from 26.31% to 30.16% for fiscal year 1994-1995.

#### Note 5 Required Supplementary Information

A ten-year historical trend designed to provide information about MSPRS progress made in accumulating sufficient assets to pay benefits when due is presented on the following pages as Required Supplementary Information. This information is presented to enable the reader to assess the progress made by MSPRS in accumulating sufficient assets to pay pension benefits as they become due.

### REQUIRED SUPPLEMENTARY INFORMATION

#### **Analysis of Funding Progress**

Each time the employer adopts a higher level of benefit, unfunded obligations are created. The law governing MSPRS requires that these additional obligations be financed systematically over a period of future years.

Analysis of the dollar amounts of net assets available for benefits, pension benefit obligation, and unfunded pension benefit obligation in isolation can be misleading. Expressing the net assets available for benefits as a percentage of the pension benefit obligation provides one indication of MSPRS funding status on a going-concern basis. Analysis of this percentage over time indicates whether the system is becoming financially stronger or weaker. Generally, the greater this percentage, the stronger the system. Trends in unfunded pension benefit obligation and annual covered payroll are both affected by inflation. Expressing the unfunded pension benefit obligation as a percentage of annual covered payroll approximately adjusts for the effects of inflation and aids analysis of MSPRS progress made in accumulating sufficient assets to pay benefits when due. Generally, the smaller this percentage, the stronger the system.

#### (\$ in Thousands)

Valuation Date September 30	Pension Benefit Obligation (PBO)	Net Assets Available for Benefits	Assets as a % of PBO	Unfunded PBO	Active Member Payroll (1)	Unfunded PBO as % of Active Member Payroll
1986	\$ 367,900 \$	276,668	75.2 %	\$ 91,232 \$	73,901	123.4 %
1987+	415,342	326,246	78.5	89,096	77,428	115.1
1988	434,878	351,333	80.8	83,545	82,267	101.6
1989	465,474	385,422	82.8	80,052	86,187	92.9
1990	519,418	414,999	79.9	104,419	88,886	117.5
1990*	552,419	414,999	75.1	137,420	88,886	154.6
1991	605,346	444,095	73.4	161,251	91,627	176.0
1992	642,157	464,919	72.4	177,238	89,899	197.2
1992*	654,153	464,919	71.1	189,234	89,899	210.5
1993*	673,703	490,900	72.9	182,803	86,792	210.6
1994	703,842	515,460	73.2	188,382	88,623	212.6
1994 (2)	706,682	515,460	72.9	191,222	88,623	215.8
1995	798,605	548,602	68.7	250,003	104,500	239.2

- + Revised valuation asset method.
- \* Benefit provisions amended.
- (1) October base payrolls.
- (2) Revised actuarial assumptions.

The comparability of trend information is affected by changes in actuarial assumptions, benefit provisions, actuarial funding methods, accounting policies, and other changes. Those changes usually affect trends in contribution requirements and in ratios that use the pension benefit obligation as a factor.

#### **Revenues of Source**

Fiscal Year							
Ended		Member		Employer	lı	nvestment and	
September 30	Co	ontributions	(	Contributions	Other Income		 Total
1986	\$	2,479	\$	15,599,644	\$	32,492,571	\$ 48,094,694
1987		56,579		19,627,561		45,427,857	65,111,997
1988		33,450		16,563,621		26,322,343	42,919,414
1989		76,245		19,675,670		35,039,483	54,791,398
1990		96,290		22,367,961		32,144,562	54,608,813
1991		57,617		28,732,958		29,459,931	58,250,506
1992		72,117		29,203,071		26,341,442	55,616,630
1993		30,065		31,183,021		35,655,914	66,869,000
1994		45,384		35,945,995		33,786,597	69,777,976
1995		71,008		37,754,338		41,578,893	79,404,239

### **Expenses by Type**

Fiscal Year						Α	dministrative	
Ended			Disability	Health	Funeral		and Other	
September 30	)	Benefits	Pensions	Insurance	Benefits		Expenses*	Total
			•					
1986	\$	10,220,140 \$	\$	2,235,807 \$		\$	164,842 \$	12,620,789
1987		12,993,755		2,271,261	1,500		268,178	15,534,694
1988		13,898,791	1,176,277	2,477,534			279,905	17,832,507
1989		15,741,570	1,240,742	3,492,353			227,713	20,702,378
1990		18,014,908	1,379,133	5,266,274			371,904	25,032,219
1991		20,573,564	1,534,544	6,578,793			466,933	29,153,834
1992		23,797,883	1,760,059	8,647,436	3,000		584,812	34,793,190
1993		27,682,904	1,957,605	10,806,667	1,500		439,037	40,887,713
1994		30,915,357	2,127,957	11,583,207	3,000		588,726	45,218,247
1995		33,141,186	2,366,398	10,131,706			622,928	46,262,218

<sup>\*</sup> Includes refunds if any.

#### **Employer Contributions - Computed and Actual**

	Valuation					
Fiscal	Date	Actual	Actual	Required	%	Excess
Year	September	Contributions (a)	Payroll	Contributions	Payroll	(Deficit)
<del></del>	30					 
1985-86	1985	\$ 13,363,837 \$	73,901,313 \$	15,571,006	21.07 %	\$ (2,207,169)
1986-87	1985	17,356,300	77,427,916	19,589,263	25.30	(2,232,963)
1987-88	1987	14,086,087	82,267,361	16,387,658	19.92 (b)	(2,301,571)
1988-89	1987	16,183,316	85,877,252	17,106,748	19.92	(923,432)
1989-90	1989	17,101,737	89,068,538	18,214,516	20.45	(1,112,779)
1990-91	1990		97,900,431	20,470,980	20.91 (c)	
1990-91	1990	22,154,215	97,900,431	23,045,761	23.54 (c)	(891,546)
1991-92	1991	20,555,635	94,934,348	23,277,902	24.52	(2,722,267)
1992-93	1992	20,376,354	90,328,409	23,909,930	26.47	(3,533,576)
1993-94	1993	23,360,943	88,554,512	23,768,031	26.84	(407,088)
1994-95	1994	25,047,023	92,561,927	24,353,043	26.31	
1994-95	1994 (b)	25,047,023	92,561,927	27,916,677	30.16	(2,869,654)

<sup>(</sup>a) Actual contributions are employer contributions net after deduction of health, dental, and vision insurance premiums.

<sup>(</sup>b) Revised actuarial assumptions.

<sup>(</sup>c) Revised benefit provisions.

# Comparative Summary Schedule of Cash Receipts and Disbursements

#### Fiscal Year Ended September 30

		1995		1994
Cash Balance at Beginning of Year	\$	5,177,128	\$	5,992,906
Add receipts:				
Member contributions	\$	71,008	\$	45,384
Employer contributions		35,537,260		35,945,995
Investment income		40,779,784		33,590,015
Investment sales and redemptions		335,495,008		362,524,794
Total cash receipts	\$	411,883,060	\$	432,106,188
Less disbursements:				
Benefit payments	\$	45,577,906	\$	44,629,521
Administrative expenses		599,263		588,726
Investments purchased		369,811,160		387,703,719
Total cash disbursements	\$	415,988,329	\$	432,921,966
Cash balance at end of year	<u>\$</u>	<u>1,071,859</u>	<u>\$</u>	<u>5,177,128</u>

## Comparative Summary of Administrative Expenses Fiscal Years Ended September 30

		1995		1994
Personnel Services:				
Staff salaries	\$	70,521	\$	47,947
Retirement and social security		17,079		11,362
Other fringe benefits		10,563		6,035
Total	\$	98,163	\$	65,344
Professional Services:				
Actuarial	\$	35,020	\$	37,720
Accounting, records management, and mail		55,787		47,719
Data processing		36,070		10,416
Attorney general		28,485		28,108
Audit		23,300		41,900
Investment		160,863		158,096
Medical		848		2,935
Total	\$	340,373	\$	326,894
Building and Equipment:				
Building rentals	<u>\$</u>	1,855	\$	1,804
Total	\$	1,855	\$	1,804
Miscellaneous:				
Office administrative support	\$	13,163	\$	13,062
Department administrative support		18,224		15,883
Travel and board meetings		585		879
Postage, telephone, and other		21,037		25,167
Total	\$	53,009	\$	54,991
Total Administrative Expenses	<u>\$</u>	<u>493,400</u>	<u>\$</u>	<u>449,033</u>

#### **Glossary of Acronyms and Terms**

actuarial accrued liability

The portion of the actuarial present value of pension plan benefits and expenses which is not provided through future normal costs. The actuarial accrued liability, at any particular time, is equal to the present value of future benefits less the present value of future normal costs.

Actuarial cost method

The budgeting process that assigns a cost of the benefits payable under the system to prior, current, and subsequent plan years. The cost of the benefits payable determined as of a specific date is referred to as the present value of benefits..

**Benefits** 

Payments to which participants may be entitled under the pension plan, including pension benefits, death benefits, and benefits due on termination of employment.

**ECR** 

Employee Contribution Reserve.

Final average compensation (FAC)

A benefit formula that bases benefits on the employee's compensation over the last 24 consecutive months of the employee's service period.

**GASB** 

Governmental Accounting Standards Board.

internal control structure

The management control environment, accounting system, and control policies and procedures established by management to provide reasonable assurance that resources are safeguarded; that resources are used in compliance with laws and regulations; and that financial transactions are properly accounted for and reported.

LIBOR

London Inter Bank Offer Rate.

MAIN

Michigan Administrative Information Network.

material weakness

A serious reportable condition in which the design or

operation of one or more of the internal control structure elements (including management controls) does not reduce to a relatively low level the risk that errors or irregularities, of a magnitude that would be material in relation to the financial statements, would not be prevented or detected.

members Employees of the Michigan Department of State Police

who have subscribed to the constitutional oath of office.

MSPRS Michigan State Police Retirement System.

**normal costs**That portion of the actuarial present value of pension plan

benefits and expenses allocated to a valuation year by the

actuarial cost method.

**ORS** Office of Retirement Systems.

**PBO** pension benefit obligation.

**PERS** public employee retirement systems.

**PPRISM** Personnel-Payroll Information System for Michigan.

**REC** Reserve for Employer Contributions.

reportable condition A matter coming to the auditor's attention that, in his/her

judgment, should be communicated because it represents a significant deficiency in the design or operation of the

internal control structure.

retirants Members who separate from service and retire with a

retirement allowance payable from the appropriate

reserve of MSPRS.

**RRBP** Reserve for Retired Benefit Payments.

Unfunded actuarially The excess of the actuarially accrued liability over the

accrued liability (UAAL) actuarial value of assets.

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